To: Wall, Dan[wall.dan@epa.gov]

From: Schmittdiel, Paula

Sent: Tue 10/21/2014 10:40:38 PM Subject: RE: Some thoughts before I forget

Dan – For our technical meeting, I just had some Qs/thoughts to ponder – see below in RED. No need to respond – just consider when we are discussing technical needs next week.

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From: Wall, Dan

Sent: Saturday, September 27, 2014 10:37 AM

To: Way, Steven; Schmittdiel, Paula **Subject:** Some thoughts before I forget

It recommend we move forward to develop an Animas river headwaters assessment plan. I am thinking from Arastra to the top. Our current arrangement may allow more flexibility in how we package things. This could serve as a risk assessment for this area but also include whatever other characterization we deem necessary.

Things I think we should consider as part of the plan:

Digest the existing data.

Turn Parks and Wildlife loose to characterize the fishery if they are so inclined. I would like to meet with them before the new year and kick around some ideas. I don't know if the state will fund them or not but maybe we will need to fund them. If it is data we both want then I don't see a problem with it.:

- 1. Electrofishing at a much finer scale than they currently have.
- 2. Consider pit tag stations to monitor the movement of the fish. I suspect they may be moving around a fair bit due to seasonal water chemistry changes. It may be important to know more about the cutthroat populations to ensure we protect them in case we actually do remove chemical barriers in the future.
- 3. Habitat should be assessed as well. The creek looks pretty skinny by the time it gets to Animas forks and may not support fish due to lack of habitat. This will likely help inform the expected benefits of any actions that may be being contemplated.

How much of this work do you think BLM can contribute resources to? Especially if it is to fund the state P/W on fishery? I wonder if we can get SGC to contribute as part of our "invite" to "continue to understand the problem"? Or maybe we don't want them involved in this stuff??

Wetland characterization

1. Jan Christner did some good work for Mike Holmes when we were characterizing and mapping deposited tailings on the Upper Arkansas. This would be right up her alley. I think we should discuss getting someone like her on board.

Who is Jan Christner – who does she work for? What's her background?

2. I think it would be helpful to at least have a hyrdo type look at the assessment plan.

I agree but not sure who to rely on at this point since many of the EPA hydro's retired.

Water and bug sampling.

1. I think we should begin a longer term bug and water monitoring program. 2-3 years of bug data typically paints a pretty clear picture.

 $\label{eq:continuous} \emph{Certainly} - \emph{We'll need to do some budget planning}.$ $\label{eq:loss} \emph{Just some thoughts I wanted to capture before I forget them} \ .$ $\label{eq:loss} \emph{Dan}$